

Treatment options to remove organic micropollutants from the urban water cycle

Dr.-Ing Alexander Sperlich

Abstract

Water quality management in urban areas can be complex due to semi-closed water cycles where wastewater treatment plant effluents are discharged into surface waters which are indirectly used as drinking water resource via bank filtration and managed aquifer recharge (MAR). The fate of organic micro-pollutants (OMPs) in the urban water cycle of Berlin (Germany) and suitable treatment options have been investigated in multiple research projects to identify treatment options to strengthen existing barriers for OMPs in the urban water cycle. In the presentation, an overview of results of applied research on OMP removal and its integration into additional treatment stages of advanced water and wastewater treatment will be given.